Amendments to the Claims

Please amend the claims as follows:

1. (currently amended) A method of reducing the effects of myocardial ischemia in a patient subjected to an ischemic event, comprising the step of:

administering a single treatment of an effective amount of erythropoietin to the patient in a pharmaceutically acceptable formulation to achieve a blood concentration of about 0.5-10 U/ml within about 1-35 minutes following administration, ~~to provide a substantially immediate decrease in the myocardial ischemia~~ the erythropoietin being administered at a time selected from the group consisting of about 1-35 minutes prior to the ischemic event, during the ischemic event, at commencement of a reperfusion, and during a reperfusion.

2. (canceled)

3. (currently amended) The method of Claim 1, wherein the single treatment consists essentially of continuously administering a dosage amount of about 50-5,000 U/kg erythropoietin ~~is continuously administered~~ to the patient for about 1-35 minutes ~~to achieve a blood concentration of erythropoietin of about 0.5-10 U/ml~~.

4. (canceled)

5. (currently amended) The method of Claim 1, wherein ~~the step of administering comprises administering~~ the erythropoietin is administered about 1-20 minutes prior to the ischemic event in an amount effective to achieve a blood concentration of about 0.8-1.5 U/ml within the about 1-35 minutes following administration.

6. (currently amended) The method of Claim 1, wherein ~~the step of administering comprises administering~~ the erythropoietin is administered in an amount effective to increase the blood level of erythropoietin in the patient to at least about 100 times above a normal level.

7. (currently amended) The method of Claim 6, wherein ~~the step of administering comprises administering~~ the erythropoietin is administered in an amount effective to increase the blood level of erythropoietin in the patient to about 0.8-1.5 U/ml within the about 1-35 minutes following administration.

8. (original) The method of Claim 1, wherein the erythropoietin is administered parenterally by intravenous, intramuscular, or subcutaneous injection.

9. (original) The method of Claim 1, wherein the decrease in the myocardial ischemia is confirmed by at least one of a decrease in tissue necrosis, maintenance of an organ function, a decrease in cardiac enzyme leakage, a decrease in cardiac contractile protein leakage, maintenance of normal left and right cardiac ventricular cavity pressure, volume and flow, a decrease in cardiac arrhythmias, and a decrease in S-T segment elevation.

10. (original) The method of Claim 1, wherein the erythropoietin is administered at the commencement of reperfusion, during reperfusion, or both.

11. (currently amended) The method of Claim 1, wherein the erythropoietin is administered prior to or during ~~an~~ the ischemic event, or both.

12. (original) The method of Claim 11, wherein the ischemic event is due to a disease state selected from the group consisting of a myocardial infarction, pulmonary infarction, stroke, and cerebral infarction.

13. (original) The method of Claim 11, wherein the ischemic event is due to a disease state selected from the group consisting of peripheral vascular occlusive disease, vascular occlusion, pre-natal or post-natal oxygen deprivation, trauma, chronic obstructive pulmonary disease,

emphysema, adult respiratory distress syndrome, septic shock, sickle cell crisis, dysrhythmia, and nitrogen narcosis or neurological deficits caused by a heart-lung bypass procedure.

14. (original) The method of Claim 11, wherein the ischemic event comprises a surgical procedure.

15. (original) The method of Claim 14, wherein the surgical procedure comprises a heart surgery.

16. (original) The method of Claim 11, wherein the ischemic event comprises a heart attack.

17. (previously presented) The method of Claim 11, wherein the ischemic event comprises an organ transplant procedure, and the erythropoietin is administered to a donor organ at least about 15 minutes prior to commencement of the transplant procedure.

18. (currently amended) A method of treating the effects of myocardial ischemia in a patient in need thereof, comprising the step of: administering a single treatment of an effective amount of erythropoietin to the patient in a pharmaceutically acceptable formulation to achieve a blood concentration of about 0.5-10 U/ml within about 1-35 minutes following administration, the erythropoietin being administered at a time selected from the group consisting of about 1-35 minutes prior to the ischemic event, during the ischemic event, at commencement of a reperfusion, and during a reperfusion, wherein a substantially immediate protective effect against myocardial ischemia occurs.

19-23. (canceled)

24. (currently amended) A method of substantially immediately reducing injury associated with myocardial ischemia and reperfusion in a patient in need thereof, comprising the step of:

administering a single treatment of an effective amount of erythropoietin to the patient in a pharmaceutically acceptable formulation to provide a blood concentration of about 0.5-10 U/ml within about 1-35 minutes following administration of the formulation, the erythropoietin being administered at a time selected from the group consisting of about 1-35 minutes prior to the myocardial ischemia, during the myocardial ischemia, at commencement of the reperfusion, and during the reperfusion.

25. (currently amended) A method of preventing or reducing an ischemic injury associated with myocardial ischemia in a patient in need thereof, comprising the step of:

administering a single treatment of an effective amount of erythropoietin to the patient in a pharmaceutically acceptable formulation to achieve a blood concentration of about 0.5-10 U/ml within about 1-35 minutes following administration and activate a protein kinase to prevent or reduce the ischemic injury, the erythropoietin being administered at a time selected from the group consisting of about 1-35 minutes prior to the myocardial ischemia, during the myocardial ischemia, at commencement of a reperfusion, and during a reperfusion.

26. (currently amended) The method of Claim 25, wherein the ~~formulation comprises an amount of~~ erythropoietin is administered in an amount effective to provide a blood level of about 0.8-1.5 U/ml erythropoietin within the about 1-35 minutes following administration to the patient.

27. (currently amended) A method of preventing or reducing an ischemic injury associated with myocardial ischemia in a patient in need thereof, comprising the step of:

administering a single treatment of an effective amount of erythropoietin to the patient in a pharmaceutically acceptable formulation to achieve a blood concentration of about 0.5-10 U/ml within about 1-35 minutes following administration and activate a potassium channel to prevent or reduce the ischemic injury, the erythropoietin being administered at a time selected from the

group consisting of about 1-35 minutes prior to the myocardial ischemia, during the myocardial ischemia, at commencement of a reperfusion, and during a reperfusion.

28. (currently amended) The method of Claim 27, wherein the ~~formulation comprises an amount of~~ erythropoietin is administered in an amount effective to provide a blood level of about 0.8-1.5 U/ml erythropoietin within the about 1-35 minutes following administration to the patient.

29. (currently amended) A method of providing substantially immediate cardioprotection in a patient in need thereof, comprising the step of:

administering a single treatment of an effective amount of erythropoietin to the patient in a pharmaceutically acceptable formulation to achieve a blood concentration of about 0.5-10 U/ml within about 1-35 minutes following administration, wherein substantially immediate cardioprotection occurs, the erythropoietin being administered at a time selected from the group consisting of about 1-35 minutes prior to a cardiac event, during the cardiac event, at commencement of a reperfusion, and during a reperfusion.

30. (canceled)

31. (currently amended) The method of Claim 30, wherein an amount of the erythropoietin is administered in an amount effective to provide a blood level of about 0.8-1.5 U/ml erythropoietin within the about 1-35 minutes following administration to the patient.

32-46. (canceled)

47. (currently amended) A method of reducing effects of myocardial ischemia in a patient in need thereof, comprising:

administering a single treatment to the patient of a unit dosage amount of erythropoietin in a pharmaceutically acceptable vehicle to achieve a blood concentration of about 0.5-10 U/ml

and substantially immediately prevent or reduce effects of myocardial ischemia within about 1-35 minutes of said administration, the erythropoietin being administered at a time selected from the group consisting of about 1-35 minutes prior to the myocardial ischemia, during the myocardial ischemia, at commencement of a reperfusion, and during a reperfusion.